Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work-"Construction of Concrete Roads And Drains in Ambedkar nagar Colony"

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Estimate Cost / Rate	100.00 Lakhs / Amount
1	Removing And Resetting Of Footpath Slab [Approved Rate]								
	(Yelahanka zone) Appproved Rate	**235.00**							
		Sqm							
	Amdekar Nagara Colony								
	3rd Main Rd Cross Rd		2	70.00	0.90		126.00		
	Connecting Roads								
			1	130.00	0.75		97.50		
			1	35.00	0.75		26.25		
			1	40.00	0.75		30.00		
			1	35.00	0.75		26.25		
			1	40.00	0.75		30.00		
			1	40.00	0.75		30.00		
			1	50.00	0.75		37.50		
			1	40.00	0.75		30.00		
							433.50		
	Deduct 30% Missing/ Damaged Slab						130.05		
							303.45	**235.00**	**71,310.75**
2	**Earth work excavation by manual means** for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work . (V-I.No 1.4,Page No-5 CSR 2023-24) & (V-III Page No.5, Item No.1.1C of CSR 2023-24)								
	Basic rate	**242.00**							
	loading And Unloading	**86.00**							
	Sub Total	**328.00**							
	Area Weightage 10%	**32.80**							
	Total	**360.80**							
		Cum							
	Drain Desilt								
	Amdekar Nagara Colony								
	3rd Main Rd Cross Rd		2	70.00	0.60	0.50	42.00		
	Connecting Roads								
			1	130.00	0.45	0.45	26.33		
			1	35.00	0.45	0.45	7.09		
			1	40.00	0.45	0.45	8.10		
			1	35.00	0.45	0.45	7.09		
			1	40.00	0.45	0.45	8.10		
			1	40.00	0.45	0.45	8.10		
			1	50.00	0.45	0.45	10.13		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	
			1	40.00	0.45	0.45	8.10		
	RCC Drain								
	Amdekar Nagara Colony								
	1st Main Rd		2	70.00	1.10	1.00	154.00		
	3rd Main Rd Connecting Rd		1	130.00	1.10	1.00	143.00		
	2nd Main Connecting Rd		1	100.00	1.10	1.00	110.00		
	Connecting Drain From Swd To End Through Ayyappa Temple		1	170.00	1.40	1.20	285.60		
	RCC Culvert		2	5.00	1.50	1.00	15.00		
	Debris		12	10.00	3.00	0.35	126.00		
	For CC Road								
	Temple Surrounding		1	50.00	3.00	0.60	90.00		
							1048.63		
	Deduct 10% Voids						104.86		
							943.76	**360.80**	340
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates** (V-1, P.No-15, I No-2.1.3 of CSR 2023-24)								
	Basic rate	**5989.00**							
	Area Weightage 10%	**598.90**							
	Total	**6587.90**							
		Cum							
	Amdekar Nagara Colony								
	1st Main Rd		2	70.00	1.10	0.15	23.10		
	3rd Main Rd Connecting Rd		1	130.00	1.10	0.15	21.45		
	2nd Main Connecting Rd		1	100.00	1.10	0.15	16.50		
	Connecting Drain From Swd To End Through Ayyappa Temple		1	170.00	1.40	0.15	35.70		
	RCC Culvert		2	5.00	1.50	0.15	2.25		
							99.00	**6587.90**	652
4	Supplying, fitting and placing **TMT FE 550 / 550D Steel Reinforcement** including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.All other type of structures .(V-I, I.No 2.11 h Page No 18,CSR 2023-24)								
	Basic rate	**79011.00**							
	Area Weightage 10%	**7901.10**							
	Total	**86912.10**							
		Ton							
	Consider 60kg/Cum For Drain		1	116.55	60.00		6993.00		
	Consider 75kg/Cum For SWD Connecting Drain		1	76.50	75.00		5737.50		
	Consider 90kg/Cum For Culvert		1	4.70	90.00		423.00		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							13153.50		
							13.15	**86912.10**	**1143198.31**
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) **M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates** (V-1,P.No.16, I.No.2.4.2 of CSR 2023-24)& (Addendum I , V-1, P.No.111 of CSR 2023-24)								
	Basic rate	**6323.00**							
	Formwork 5%	**316.15**							
	Sub Total 1	**6639.15**							
	Area Weightage 10%	**663.92**							
	Total	**7303.07**							
		Cum							
	RCC Drain Raft								
	Amdekar Nagara Colony								
	1st Main Rd		2	70.00	0.90	0.15	18.90		
	3rd Main Rd Connecting Rd		1	130.00	0.90	0.15	17.55		
	2nd Main Connecting Rd		1	100.00	0.90	0.15	13.50		
	Connecting Drain From Swd To End Through Ayyappa Temple		1	170.00	1.20	0.15	30.60		
	RCC Drain Wall								
	Amdekar Nagara Colony								
	1st Main Rd		4	70.00	0.15	0.60	25.20		
	3rd Main Rd Connecting Rd		2	130.00	0.15	0.60	23.40		
	2nd Main Connecting Rd		2	100.00	0.15	0.60	18.00		
	Connecting Drain From Swd To End Through Ayyappa Temple		2	170.00	0.15	0.90	45.90		
							193.05		
	RCC Culvert Raft		2	5.00	1.20	0.20	2.40		
	RCC Culvert Wall		4	5.00	0.23	0.50	2.30		
							4.70		
							197.75	**7303.07**	**1444181.10**
6	Providing and fixing precast reinforced cement concrete **covering slabs of 10Cm thick** made of M20 with OPC cement, with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	**2072.00**							
		Sqm							
	Amdekar Nagara Colony								
	1st Main Rd		2	70.00	0.90		126.00		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	3rd Main Rd Connecting Rd		1	130.00	0.90		117.00		
	2nd Main Connecting Rd		1	100.00	0.90		90.00		
	Connecting Drain From Swd To End Through Ayyappa Temple		1	170.00	1.20		204.00		
	Damaged/ Missing Slab From Item No-01						**130.05**		
							667.05	**2072.00**	**1382127.60**
7	Providing and fixing precast reinforced cement concrete **covering slabs of 23Cm thick** made of M25 with OPC cement,@340kgs/cum with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	**5037.00**							
		Sqm							
	For RCC Culvert		2	5.00	1.20		12.00		
							12.00	**5037.00**	**60,444.00**
8	**Earth work in surface excavation by mechanical means** for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work In all kinds of soils upto 300 mm depth ((V-I, P.No-8, I No-1.12 of CSR 2023-24)								
	Basic rate	**95.00**							
	Area Weightage 10%	**9.50**							
	Total	**104.50**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Amdekar Nagara Colony								
	1st Main Road		2	200.00	0.60	0.25	60.00		
							60.00	**104.50**	**6,270.00**
9	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density (V-III, P.No-26,I No-4.17)of CSR 2023-24).								
	Basic rate	**2559.00**							
	Area Weightage 10%	**255.90**							
	Total	**2814.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Amdekar Nagara Colony								
	1st Main Road		2	200.00	0.60	0.225	54.00		
							54.00	**2814.90**	**152004.60**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
10	Providing and applying **primer coat** with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (V-III, P.No-31,I No-5.1(i) of CSR 2023-24).								
	Basic rate	**41.00**							
	Area Weightage 10%	**4.10**							
	Total	**45.10**							
		Sqm							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Amdekar Nagara Colony								
	1st Main Road		2	200.00	0.60		240.00		
							240.00	**45.10**	**10,824.00**
11	Providing and applying **tack coat** with VG-10 Bitumen using pressure distributor at the rate of 0.20 kg/m2on the prepared bituminous surface cleaned with mechanical broom.(V-III, P.No-43,I No-5.32 of CSR 2023-24).								
	Basic rate	**12.00**							
	Area Weightage 10%	**1.20**							
	Total	**13.20**							
		Sqm							
	For BC								
	Amdekar Nagara Colony								
	1st Main Road		1	200.00	6.00		1200.00		
							1200.00	**13.20**	**15,840.00**
12	Providing and laying Dense **Graded Bituminous Macadam** with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects. (V-III, P.No-35,I No-5.12C of CSR 2023-24).								
	Basic rate	**9449.00**							
	Area Weightage 10%	**944.90**							
	Total	**10393.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Amdekar Nagara Colony								
	1st Main Road		2	200.00	0.65	0.05	13.00		
							13.00	**10393.90**	**135120.70**
13	Providing and laying **Bituminous Concrete** with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects (V-III, P.No.38, I.No.5.16C of CSR 2023-24).								
	Basic rate	**10954.00**							
	Area Weightage 10%	**1095.40**							
	Total	**12049.40**							
		Cum							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	For BC								
	Amdekar Nagara Colony								
	1st Main Road		1	200.00	6.00	0.04	48.00		
							48.00	12049.40	578371.20
14	Construction of **dry lean cement concrete** Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing. (V-III Page No.49, Item No.6.1 of CSR 2023-24)								
	Basic rate	**4920.00**							
	Area Weightage 10%	**492.00**							
	Total	**5412.00**							
		Cum							
	For Sanitary Cut Portion								
	Amdekar Nagara Colony								
	Bhimaraj Janadhran Rd		1	35.00	0.60	0.10	2.10		
	Connecting Roads								
			1	35.00	0.60	0.10	2.10		
			1	40.00	0.60	0.10	2.40		
			1	35.00	0.60	0.10	2.10		
	New CC Road								
	Temple Surrounding		1	50.00	3.00	0.15	22.50		
							31.20	5412.00	168854.40
15	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 **M30 (Grade)**, coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity andappropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.(V-III, P.No-148,I No-16.28, CSR 2023-24).								
	Basic rate	**6754.00**							
	Area Weightage 10%	**675.40**							
	Total	**7429.40**							
		Cum							
	For CC Road								
	Amdekar Nagara Colony								
	2nd Main Rd		1	60.00	3.00	0.10	18.00		
	3rd Main Rd		1	60.00	3.50	0.10	21.00		
	Bhimaraj Janadhran Rd		1	35.00	3.80	0.10	13.30		
	Temple Surrounding		1	50.00	3.60	0.15	27.00		
	Connecting Roads								
			1	135.00	3.50	0.10	47.25		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
			1	135.00	3.50	0.10	47.25		
			1	35.00	3.50	0.10	12.25		
			1	40.00	3.50	0.10	14.00		
			1	45.00	3.50	0.10	15.75		
			1	40.00	3.50	0.10	14.00		
			1	40.00	3.50	0.10	14.00		
			1	40.00	3.50	0.10	14.00		
			1	50.00	3.80	0.10	19.00		
			1	40.00	4.00	0.10	16.00		
							292.80	**7429.40**	**2175328.32**
16	Providing and laying of **hot applied thermoplastic compound** 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.(V-III,I No-8.15, P.No-67 of CSR 2023-24)								
	Basic rate	**530.00**							
	Area Weightage 10%	**53.00**							
	Total	**583.00**							
		Sqm							
	For Edge Line								
	Amdekar Nagara Colony								
	1st Main Road		2	200.00	0.10		40.00		
							40.00	**583.00**	**23,320.00**
17	Cost of Haulage Excluding Loading and Unloading, taking output 25 t load and lead 10 km = 100 t.km (V-III Page No.5, Item No.1.4C of CSR 2023-24)								
	Basic rate	**8.00**							
	10KM Lead = 8*10	**80.00**							
	Area Weightage 10%	**8.00**							
	Total	**88.00**							
		t.Km							
	Qty frm Item No-2		1	943.76	1.28		1208.02		
	Qty frm Item No-3			60.00	1.28		76.80		
							1284.82	**88.00**	**113063.81**
								Total Construction Cost	**8472970.40**
								18% GST For S.R Items	**1525134.67**
								Sub Total 1	**9998105.07**
								Utility Shifting,Miscellaneous and Rounding off	**1,894.93**
								GRAND TOTAL	**10000000.00**

Administrative Sanction for Rs. 100.00 Lakhs
Proposed Formation Rd
is accorded under Head
Registered as CE No. 4.6 Subject
to conditions contained in enclosed memo
No. BBMP/CE/YNK-Plas/L.6/23-24 Dt. 12/2/24
Executive Engineer

Approved for 100.00 Lakhs
Head of A/C P-1878
CER NO : 108 Dt: 13/2/24

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2023-2024, Data Rates

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore